

Name	Sequence	Function	Direction
E P0001	ATAGGCGTATCACGAGGCAG	for sequencing of inserts in pSB1C3, binds to pSB1C3	fwd
E P0003	CAGCGAGTCAGTGAGCGA	for sequencing of inserts in pSB1C3, binds to pSB1C3	rev
E P0005	GATATTCGCAAGAATTCGCGG	amplification of insert EI0002, binds to additional basepairs	fwd
E P0006	GTTCTGTTCTAACTGCAGCG	amplification of insert EI0002, binds to additional basepairs	rev
E P0015	GATCATATCGCGCATGAATGGGCCAG AGCGTGCCGTATG	SDM Tyr-Trp, binds to insert EI0002	fwd
E P0016	CATACGGCACGCTCTGGGCCATTCAT GCGGATATGATC	SDM Tyr-Trp, binds to insert EI0002	rev
E P0017	GATCATATCGCGCATGAATAGGCCAG AGCGTGCCGTATG	SDM Tyr-UAG, binds to insert EI0002	fwd
E P0018	CATACGGCACGCTCTGGGCTATTCAT GCGGATATGATC	SDM Tyr-UAG, binds to insert EI0002	rev
E P0019	GTATAACGGCACCTACATGGCGACCCC	SDM Ser-Tyr + Ser-UAG (part 1), binds to insert EI0002	fwd
E P0020	GGGGTCGCCATGTAGGTGCCGTATAC	SDM Ser-Tyr + Ser-UAG (part 1), binds to insert EI0002	rev
E P0021	GTATAACGGCACCTAGATGGCGACCCC GCATG	SDM Ser-UAG (part 2), binds to insert EI0002	fwd
E P0022	CATGCGGGTCGCCATCTAGGTGCCGT TATAC	SDM Ser-UAG (part 2), binds to insert EI0002	rev
E P0023	TCGCAAGAATTCGCGGCCGCTTCTAGA TGAAATACCTGCTGCCGACC	extraction of BBa_K2020001, binds to secretion tag of EI0002, prefix-overhang	fwd
E P0024	TCGCAAGAATTCGCGGCCGCTTCTAGG CGGGCAAAGCAGCAC	extraction of BBa_K2020000, binds to pro-peptide of EI0002, prefix-overhang	fwd
E P0025	TTCTAACTGCAGCGGCCGCTACTAGTA TTAACTGCGCCGCCGC	extraction of BBa_K2020000/1, binds to Subtilisin of EI0002, suffix-overhang	rev
E P0026	TTACGATGCCATTGGGATATATCAAC	extraction of the expression system, binds to pSB1C3	fwd
E P0027	TCGCAAGAATTCGCGGCC	amplification of biobricks, binds to EP0023 sequence (prefix)	fwd
E P0028	TTCTAACTGCAGCGGCCGCTACTAGTA TTACTGCGCCGCCGC	extraction of BBa_K2020000/1, binds to Subtilisin of EI0002, correction of E P0025	rev

Name	Sequence	Function	Direction
YP0001	TATGGAATTCGCCGAAAAAGCAGTAC AGAAAAGAAATACATTGTC	long, for extraction of Subtilisin gen with EcoRI	fwd
YP0002	TATGGAATTCATGCCCGAAAAAGCAG TACAGAAAAGAAATACATTGTC	Same primer as YP0003 with extra start codon	fwd
YP0003	TTACCTCGAGATGGTGGTGGTGATGAT GTTGTGCAGCTGCTTGACGTTGATTA A	for extraction of Subtilisin gen with XhoI and his tag (wrong stop codon)	Rev
YP0004	CCGTGATCGTTTAGAAAGCACTG	Sequencing SubE (Subtilisin E) border	Rev
YP0005	GGCGGAACTCATGGCACTCATTG	Sequencing SubE border	Fwd
YP0006	CACCTCGAGTTATTAATGGTGGTGGTG ATGATGTTGTGCAGCTGCTTGACGTT GATTAA	SubE extraction with his tag, XhoI	rev
YP0007	GGACGGCAGTTCTCACGGTA	Sequencing SubE in gene	Fwd
YP0008	GCTGTTTACCGCACCTACTGC	Sequencing SubE in gene	Rev
YP0009	GGGTGTCGTTAATTACCCGTAC	Sequencing SubE with secretion tag	fwd
YP0010	CTTATAACGGAACGTAGATGGCGACTC CT	QuikchangeSer221AmberStop in SubE	fwd
YP0011	AGGAGTCGCCATCTACGTTCCGTTATA AG	QuikchangeSer221AmberStop in SubE	rev
YP0012	CACCTCGAGTTATTATTGTGCAGCTGCT TGTACGTTGATTAA	SubE extraction with XhoI	rev
YP0013	ATGCAAGAGCAATACCGC	LeuS Sequencing wild type synthetase for Serine	fwd
YP0014	TTAGCCAACGACCAGATTGAG	LeuS Sequencing wild type synthetase for Serine	rev
YP0015	GAATTCGCGGCCGCTTCTAGATGAGAT TTCCTTCAATTTTACTGCAG	Extraction of SubE with secretion tag +BB_Prefix	fwd
YP0016	GATAAGCTTATGAGATTTCTTCAATTT TACTGCAG	Extraction of cSubE with secretion tag + Hind III	fwd
YP0016b	CATAATAAAGTGACACCC	Possibly Sequencing of DMNBS-synthetase	fwd
YP0017	CCCACCTCGAGTTATTAGTGGTGATGA TG	Extraction of cSubE (codon optimized SubE) with secretion tag + Hind III	rev
YP0017b	AATGTTACATGCGTACACG	Possibly for sequencing of DMNBS-Synthetase	rev
YP0018	CAGCACTGAATAACTCAATC	Sequencing end of cSubE gene	fwd
YP0018b	TGAGGGGTATCTCGAAG	Possibly Sequencing of DMNBS-synthetase	rev
YP0019	CTGCCCTGACCCTGTTGAATC	Sequencing front of cSubE gene	rev
YP0019b	ACAGGAAAGAGTTACTC	Possibly Sequencing of DMNBS-synthetase	rev
YP0020	GTATAACGGCACCTAGATGGCGACTCC TCATG	Quikchange of condon optimized Subtilisin	fwd

YP0021	GTATAACGGCACCTAGATGGCGACTCC TCATG	Quickchange of condon optimized Subtilisin	rev
YP0022	ATTTTCGGTTTGTATTACTTC	sequencing pESCTrp (Galpromotor)	fwd
YP0023	GGTGGTAATGCCATGTAATATG	sequencing pESCTrp (Galpromotor)	fwd
YP0024	CGCGTGCATTCATCCGCT	primers to get a linear vector (Gibson vector)	fwd
YP0025	ATCGCACGCATTCCGTTG	primers to get a linear vector (Gibson vector)	rev
YP0026	cggaatgcgtgcgatATAGCTTCAAAATGTT TCTACTCC	Gibson Assembly overhang to cSubE	fwd
YP0027	ggatgaatgcacgcgTTATTAGTGGTGATG ATGATGATG	Gibson Assembly overhang cSubE	rev
YP0028	AGCTGAATTCGCCGGAAG	amplification of gblock cSubE	fwd
YP0029	CCCACCTCGAGTTATTAGTGGTG	amplification of gblock cSubE	rev
YP0030	CGATAGTGGGATAGATAGCAG	Sequencing the back of the cSubE gene	fwd
YP0031	CCTTCAATTTTACTCCAGTTTATTCGC AGC	Quickchange PstI out of secretion tag Mfalp	fwd
YP0032	GCTGCGAATAAACTGGAGTAAAAATT GAAGG	Quickchange PstI out of secretion tag Mfalp	rev
YP0033	GGATGATCCAGTAGTACGGATTAGAA GC	Quickchange SpeI deletion in pyes2	fwd
YP0034	GCTTCTAATCCGTACTACTGGATCATCC	Quickchange SpeI deletion in pyes2	rev
YP0035	GCTTCTAATCCGTACTACTGGATCATCC	adds SpeI to pyes2	Fwd
YP0036	GATACTAGTGAGGGCCGCATCATGTAA TTAG	adds SpeI to pyes2	rev
YP0037	CGGTTAGAGCGGATGTGGG	Sequencing insert in pyes2	rev
YP0038	CCCCGGATCGGACTACTAGC	Sequencing insert in pyes2	fwd
YP0039	GTTGTAGTGTGACTGGAGCAGC	Mistake	rev
YP0040	CTAATCCGTGGAGTAGTGGATCGATC	Spe1 deletion in pYES2 (SDM)	fwd
YP0041	GATCGATCCACTACTCCACGGATTAG	Spe1 deletion in pYES2 (SDM)	rev
YP0042	GCACATCTGCGTTTCAGGAACG	mCherry amplification	Rev
YP0043	AGCTGAATTCGCGCCGCTTCTAGATG	mCherry amplification	Fwd
YP0044	CCCACCTCGAGGTGATCTACACTAGCA CTATCAGTG	Sequencing of GAL promotor	rev
YP0045	GAAGGGTTTAAGTGGGAG	sequencing mCherry	fwd
YP0046	TTTGCATAACCGGGCCGTC	sequencing mCherry	rev
YP0047	GATGAATTCGCGGCCGCTTCTAGAGTG AGATTTCCTTCAATTTTACT	Biobrickrestriction sites for Secretion tag Mfalp	fwd
YP0048	GATCTGCAGCGGCCGCTACTAGTAAGC TTCAGCCTCTCTTTATC	Biobrickrestriction sites for Secretion tag Mfalp	rev
YP0049	GATCTGCAGCGGCCGCTACTAGTAGTG ATCTACACTAGCACTATCAGTG	Biobrick secretion tag +rfp	rev

Synthetase

Name	Sequence	Function	Direction
SP0001	GCTGACTGGGTTGAAGG	sequencing synthetase	Rev
SP0002	GAAGTCAGCCCCATACG	sequencing synthetase	fwd
SP0003	CGAGAAGAGCGCCGGTATTGGCTTCG AAC	Quikchange Tyr32Gly	Fwd
SP0004	GTTCGAAGCCAATACCGGCGCTCTTCT CG	Quikchange Tyr32Gly	rev
SP0005	GTTCATGACCATGACATTAAC	sequencing pRXG	fwd
SP0006	GCTTCCTTAGCTCCTG	sequencing pRXG	rev
SP0007	GTGTATCGTCTGGCACTG	sequencing synthetase	fwd
SP0008	CGGGCGTTTAATGGTC	sequencing synthetase mutation sites	rev
SP0009	CAAGACGGTGAGTTCATC	sequencing pRXG inner	fwd
SP0010	GAGAATATTGCCATCCTCC	sequencing pRXG inner	rev
SP0011	CGATATCATCATTSdTCTGGCCGATCTG C	SSM forward 65	fwd
SP0012	GCAGATCGGCCAGAHSAATGATGATAT CG	SSM reverse 65	Rev
SP0013	CATGCAGGTGAACVSCMNCCACTATCT GGGCG	SSM forward 158, 159	Fwd
SP0014	CGCCAGATAGTGGSBGNKGTTCACCT GCATG	SSM reverse 158,159	Rev
SP0015	GGAACAGCGCAAABYTBATGCTGGC TCGTG	SSM forward 176,177	fwd
SP0016	CACGAGCCAGCATARVARVTTTGCGCT GTTCC	SSM reverse 176,177	rev
SP0017	GACCATTAAACGCCCCG	Sequencing of synthetase plasmid backbone	Fwd
SP0018	CCTTCAACCCAGTCAGC	Sequencing backbone 3910-3926	Fwd
SP0019	TGCCAACATAGTAAGCCAG	Sequencing backbone reverse on Ori 1502-1518	Rev
SP0020	TGGCTCTCTATACAAAGTTGG	Sequencing backbone reverse on GentR 311-331	Rev
SP0021	CGTATGGGGCTGACTTC	Sequencing backbone reverse 2369-2385	Rev
SP0022	CAACTTTGTATAGAGAGCCAC	Sequencing backbone forward on GentR 312-322	Fwd
SP0023	GCCACTACCTGCCGATCAAGAAGATG	SDM Pst1 Synthetase	Fwd
SP0024	CATCTTCTTGATCGGCAGGTAGTGGC	SDM Pst1 Synthetase	rev
SP0025	GATCGATCTGCCGAACGCGGGCTTC	SDM Pst2 Synthetase	fwd
SP0026	GAAGCCCGCGTTCGGCAGATCGATC	SDM Pst2 Synthetase	rev
SP0027 a	AAGCCACGTTGTGTCTC	Sequencing RS Gent/ deletion of oNBY RS	rev

SP0027 b	ACCACCTACTAGTAGCGGCCGCTGCAG CTTGAGAGCCTTCAACCC	Darmstadt coll. Backbone biobrick	Fwd
SP0028	ACCACCCTCTAGAAGCGGCCGCGAATT CCTTCTCGATGATAATGCTGTC	Darmstadt coll. Backbone biobrick	rev
SP0029	TGCGCTTGAATTCGCG	Amplification gBlock pRXG	fwd
SP0030	AACAGCGCACTGCAGC	amplification gBlock pRXG	rev
SP0031	TGT TTA GAA TTC GCG GCC G	amplification OMeT Darmstadt	fwd
SP0032	ACA AGT CTG CAG CGG CC	amplification OMeT Darmstadt	Rev
SP3001	ACCACCGAATTCGCGGCCGCTTCTAGA GCCGGCGGTAGTTCAGCAGG	biobrick tRNA prefix	fwd
SP3002	GGTGGTTACTAGTAGCGGCCGCTGCA GTGGTCCGGCGGGCCG	biobrick tRNA suffix WRONG	rev
SP3003	ACCACCGAATTCGCGGCCGCTTCTAGA GATGGACGAGTTCGAGATG	biobrick Synthetase prefix	fwd
SP3004	GGTGGTTACTAGTAGCGGCCGCTGCA GTTACAGACGTTTGCGAATC	biobrick Synthetase suffix WRONG	rev
SP3005	TGGTGGCTGCAGCGGCCGCTACTAGTA TGGTCCGGCGGGCCG	biobrick tRNA suffix	Rev
SP3006	GGTGGTCTGCAGCGGCCGCTACTAGTA TTACAGACGTTTGCGAATC	biobrick Synthetase suffix	Rev